

Link Parameters	Units	48K6G7W
Uplink frequency	GHz	6.18
Downlink frequency	GHz	3.96
User data rate	kbit/s	56
Modulation		QPSK
Total coding rate		0.691
Carrier bandwidth	kHz	48.6
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	41.9
Earth station diameter	m	4.5
Earth station gain	dBi	47.4
Uplink input power per carrier	dBW	-5.5
Uplink input power density	dBW/Hz	-52.4
Atmospheric loss	dB	0.1
Free space path loss	dB	200.0
G/T satellite (-3 dB contour)	dB/K	-1.7
C/N thermal uplink	dB	21.9
C/I XPOL, ACI, ASI	dB	19.6
C/(N+I) uplink	dB	17.6
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	8.6
Atmospheric loss	dB	0.1
Free space path loss	dB	196.1
Earth station diameter	m	4.5
Earth station gain	dBi	43.6
Noise temperature	K	100.0
Earth station G/T	dB/K	23.6
C/N thermal downlink	dB	17.7
C/I XPOL, ACI, IM, ASI	dB	12.5
C/(N+I) downlink	dB	11.4
Overall:		
C/(N+I) overall	dB	10.4
C/(N+I) required	dB	5.7
Margin	dB	4.7